

connected to the ATM network through channels and plural terminals respectively connected to the plural frame relay networks through channels, said traffic control method comprising steps of:

[a step of] measuring a data quantity transmitted through each channel;

[a step of] operating a traffic restrictive level corresponding to the data quantity of each channel which is measured, per channel, wherein the traffic restrictive level is a level to prevent excess of contract cell rate of the ATM network and has a plurality of levels; and

[a step of] performing a traffic restrictive process corresponding to a level of the traffic restrictive level which is operated about each channel.

9.(amended) A network system comprising:

an ATM (Asynchronous Transfer Mode) network;

plural frame relay networks respectively connected to the ATM network through channels;

plural terminals respectively connected to the plural frame relay networks through channels;

a data quantity measurement [means for] portion measuring a data quantity transmitted through each channel;

a restrictive level operation [means for] portion operating a traffic restrictive level corresponding to the data quantity of each channel measured by said data quantity measurement [means] portion, per channel, wherein the traffic restrictive level is a level to prevent excess of contract cell rate of the ATM network and has a plurality of levels; and

a traffic control [means for] portion performing a traffic restrictive process corresponding to a level of the traffic restriction level operated about each channel by said restrictive level operation [means] portion.

10.(amended) A network system comprising:

- an ATM (Asynchronous Transfer Mode) network;
- plural frame relay networks respectively connected to the ATM network through channels;
- plural terminals respectively connected to the plural frame relay networks through channels;
- a data quantity measurement [means for] portion measuring a data quantity transmitted through each channel;
- a restrictive level operation [means for] portion operating a traffic restrictive level corresponding to the data quantity of each channel measured by said data quantity measurement [means] portion, per channel, wherein the traffic restrictive level is a level to prevent excess of contract cell rate of the ATM network and has a plurality of levels;
- a restrictive process storage [means for] portion storing information of a traffic restrictive process corresponding to a level of the traffic restrictive level operated by said restrictive level operation [means] portion about each channel; and
- a traffic control [means for] portion reading out the information of the traffic restrictive process corresponding to the traffic restrictive level operated by said restrictive level operation [means] portion about each channel from said restrictive process storage [means] portion and [for] performing the traffic restrictive process corresponding to the information read out from said restrictive process storage [means] portion to each channel.

11.(amended) A network system according to claim [the one of the claims 9 and] 10, wherein at least one of the plural terminals is connected to the ATM network through no frame relay network.

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12.(amended) A frame relay switch in plural frame relay networks in a network system comprising an ATM (Asynchronous Transfer Mode) network, said plural frame relay networks respectively connected to the ATM network through channels and provided with plural frame relay switch, and plural terminals respectively connected to the plural frame relay networks through channels, said frame relay switch comprising:

a data quantity measurement [means for] portion measuring a data quantity transmitted through each channel;

a restrictive level operation [means for] portion operating a traffic restrictive level corresponding to the data quantity of each channel measured by said data quantity measurement [means] portion, per channel, wherein the traffic restrictive level is a level to prevent excess of contract cell rate of the ATM network and has a plurality of levels;

a restrictive process storage [means for] portion storing information of a traffic restrictive process corresponding to a level of the traffic restrictive process corresponding to a level of the traffic restrictive level operated by said restrictive level operation [means] portion about each channel; and

a traffic control [means for] portion reading out the information of the traffic restrictive process corresponding to the traffic restrictive level operated by said restrictive level operation [means] portion about each channel and performing the traffic restrictive [process] processes corresponding to the information read out from said restrictive process storage [means] portion to each channel.